

**BY ORDER OF THE
307TH BOMB WING COMMANDER**

307TH BOMB WING INSTRUCTION 21-105

9 MAY 2014



Maintenance

**LAUNCH/RECOVERY, END OF RUNWAY,
AND IMPOUNDMENT PROCEDURES FOR
EXPLOSIVE-LOADED B-52 AIRCRAFT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication is in compliance with Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*, and establishes procedures for loading or unloading of Hazard Class/Division (HC/D) 1.1, 1.2, 1.3, 1.4 conventional weapons on B-52 aircraft parked on Barksdale Flightline, as required by AFMAN 91-201, *Explosive Safety Standards*. This instruction is applicable to all maintenance personnel assigned to the 307th Bomb Wing at Barksdale Air Force Base. References: T.O. 1B-52H-33-2-1 and 1B-52H-33-2-2, *Non Nuclear Munitions Loading Procedures*; T.O. 11A1-33, *Handling and Maintenance of Explosives Loaded Aircraft*; and AFI91-203, *Air Force Consolidated Occupational Safety Instruction*, AFMAN 91-201, AFRCSUP_1, AFGSCSUP_BARKSDALEAFSUP, *Explosive Safety Standards*.

Ensure that all records created as a result of processes prescribed in this publication are maintained In Accordance With (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command.

1. Responsibilities. It is the responsibility of all maintenance personnel to comply with all written guidance to ensure all required repairs, inspections and documentation are completed in a safe, timely and effective manner. Ensure the most current publication is used.

2. Explosive Limits. Limited to HC/D 1.1, 1.2, 1.3, 1.4 to minimum operational requirements, not to exceed maximum allowance net explosive weight for Barksdale Flightline loading sites per AFMAN 91-201, AFGSCSUP_BARKSDALEAFSUP.

3. Personnel Limits. One Weapons Flight Expeditors, two certified load crews, one loading supervisor, six munitions personnel (if required), one Flightline Expediter, two aircraft crew chiefs and two casualties (Safety, Quality Assurance).

4. Equipment/Personnel Protective Equipment (PPE) Required. The Weapons Flight Expediter and weapons crew chiefs will determine the requirements of the specific equipment items to be used in the explosive area. PPE will be safety goggles/glasses for load crew members required to cut safety devices or arming wire. All members require safety toe boots/shoes, hearing protection (single/double) is required IAW the current Bioenvironmental Survey. Reflective belts are required during darkness or low visibility.

5. Location. Approved explosive sited B-52 Combat Aircraft Parking Areas (CAPA) per AFMAN 91-201, AFGSCSUP_BARKSDALEAFSUP.

6. Operations Safety.

6.1. The Weapons Flight Chief/Expediter has overall responsibility for the safety of all operations.

6.2. Unauthorized individuals are prohibited from operation area.

6.3. All provisions of applicable loading technical data and safety publications will be followed at all times.

6.4. Fire, drop or collision of ammunition, partially armed or armed fuse condition:

6.4.1. In case of fire:

6.4.1.1. Cease all operations.

6.4.1.2. Notify the Maintenance Operations Center (MOC). MOC will contact the Command Post, Fire Department, 307 Wing Safety Office (307WG/SE) and initiate the emergency checklist. The weapons crew chief or expediter will follow loading checklist for fire.

6.4.2. Drop or collision of a munitions or armed fuse condition.

6.4.2.1. Cease all operations.

6.4.2.2. Notify MOC/Munitions Control. MOC will initiate the notification checklist, notifying Command Post and the Fire Department. Command Post will notify Explosive Ordnance Disposal (EOD) and initiate the emergency checklist. The loading checklist will be followed for initial withdrawal distance.

6.4.2.3. The on-scene commander will determine, with input from EOD, any additional evacuation requirements depending on the given situation.

6.4.2.4. When the area has been rendered safe by EOD and the on-scene commander is notified by EOD, only then will any operations resume.

6.5. Personal injury.

6.5.1. Cease operations in the immediate area.

6.5.2. Notify MOC. Give the location and condition of the injured person(s). MOC will initiate the Notification Checklist.

6.5.3. Administer first aid.

6.5.4. Operations will resume once the injured person(s) is removed and a certified replacement is present.

7. Munitions Loading of Aircraft (Hazard Classes 1, 1, 1.2, 1.3, 1.4).

7.1. Upon receipt of munitions requirements for loading all Quantity-Distance (Q-D) requirements will be reviewed by the 307 AMXS Weapons Expediter or the Weapons Flight Chief to ensure compliance of AFMAN 91-201, AFRCSUP_1 and AFGSCSUP_BARKSDALEAFSUP.

7.2. Airframe, Powerplant General (APG) personnel will be responsible for the following:

7.2.1. Ensure that a serviceable fire extinguisher is available at each aircraft.

7.2.2. Ensure aircraft are positioned at designated parking spots.

7.2.3. Ensures that aircraft forms are with each aircraft.

7.3. Weapons Personnel will be responsible for the following:

7.3.1. Notifies MOC of loading operation.

7.3.2. MOC will notify the Fire Department with munitions configuration.

7.3.3. Ensures all fire symbols are posted IAW AFMAN 91-201 and personnel limits are adhered to.

7.3.4. Conducts a safety briefing with all personnel in the operation area IAW applicable loading checklist and WSS procedures.

7.3.5. Verifies aircraft is parked on a designated spot and is grounded with one ground only.

7.3.6. CAPA V4, W4, X4, Y4 and Z4. CAPAs V4-Z4 are sited for 20,000 pounds NEW HC/D 1.1. however, when the NEW of HC/D 1.1 explosives exceed 3,300 pounds, adjacent aircraft will not be present on V3, W3, X3, Y3, Z3 respectively. 307AMXS Weapons Expediter will coordinate with MOC prior to loading. MOC will take appropriate actions to ensure aircraft are evacuated as required.

7.3.7. CAPA V4 Explosives will not be present on CAPA V4 when cargo deployment activities are being conducted at facility 6612. 307 AMXS Weapons Expediter will coordinate with MOC prior to loading. MOC will take appropriate actions to ensure deployment activities are not being conducted prior to loading CAPA V4.

8. Downloading of Munitions (Hazard Classes 1, 1, 1.2, 1.3, 1.4). All procedures in paragraph 7.1. will be followed.

9. EOR Procedures.

9.1. Reception and parking. The APG Flight will ensure that a B-4/5 stand (flare only), chocks and two personnel are available on the appropriate hammerhead/taxiway prior to aircraft landing if necessary for hung/retained/unconfirmed hung munitions/flares. APG Flight personnel will stop the aircraft on the hammerhead/taxiway. After APG Crew Chief establishes communications with the aircrew, weapons EOR crew will inspect the aircraft to determine the status of munitions/flares.

9.2. Flares.

9.2.1. If no attempt was made to expend flares and flares are retained and it is determined that the aircraft has no damage, no unsafe condition exists and that electrical power is or can be isolated from the flares, the aircraft will be released for normal taxi to its assigned spot and normal download procedures will apply.

NOTE: External power and post flight inspections may proceed if flares are not to be down loaded immediately.

9.2.2. If an attempt was made to expend flares and all flares have not expended and it is determined that the aircraft has no damage, no unsafe condition exists and that electrical power is or can be isolated from the flares, the aircraft will be released for normal taxi to its assigned spot and normal download procedures will apply. **DO NOT** apply external power until the flares are downloaded.

9.2.3. If an attempt was made to expend flares and all flares have not expended and power cannot be isolated from the flares or any abnormalities exist contact MOC. MOC notifies Command Post, who will notify the EOD team for response to the aircraft. The APG Crew Chief will instruct the aircrew to shut down engines and will call for a tow crew. After engine shutdown, EOD/weapons EOR crew will remove the affected flare dispensing canister(s) and ensure the aircraft is safe to tow. The APG Flight will then tow the aircraft to its assigned spot. EOD will take possession of the affected canister(s).

9.2.4. Subject matter experts will coordinate with QA and the investigating authority (307 WG/SE and Safety Investigation Board) to identify malfunctions and determine the cause.

9.3. Hung/Retained Bombs Procedures.

9.3.1. Definitions:

9.3.1.1. HUNG ordnance (LIVE or INERT) is a weapon that does not separate from the aircraft after an attempted release and is considered an Unsafe Weapons Condition. An attempted release occurs when the aircraft issues a release pulse in either automatic or manual mode with all switches positioned correctly.

9.3.1.2. RETAINED ordnance (LIVE or INERT) is a weapon(s) where the aircrew did not attempt to release and is considered a Safe Weapons Condition.

9.3.1.3. Unconfirmed Hung Weapon: A weapon without visual confirmation of release by external spot or crew visual inspection.

9.3.2. The MOC will initiate notification checklist when a B-52 with hung bombs will be recovered at Barksdale. The Weapons Flight will dispatch an EOR crew to meet the aircraft.

9.3.3. Landing with Hung Ordnance: Aircraft landing with hung ordnance and/or unconfirmed hung ordnance will back taxi on the runway, exit and stop at the center of the Bravo Taxiway to conduct a Ground Weapons Check (GWC) by weapons EOR crew. Following visual confirmation that all ordnance is safe by GWC personnel, the aircraft will taxi to parking. In the event multiple aircraft return with hung ordnance, the priority locations for GWCs are: 1. Bravo Taxiway, 2. North Hammerhead, and 3. South Hammerhead. The South Hammerhead will only be used if aircraft conducting GWC have not cleared Bravo Taxiway or the North Hammerhead.

9.3.4. Landing with retained ordnance: Aircraft equipped with bomb bay cameras, aircrew can visually confirm condition of internally loaded weapons. Retained ordnance on the front three stations of Heavy Stores Adapter Beam (HSAB) can be visually verified by pilot or co-pilot. All other aircraft landing with retained ordnance will enter the rollout hammerhead to conduct a GWC by weapons EOR crew. Following visual confirmation that all ordnance is safe by GWC personnel, the aircraft will taxi to parking.

9.3.5. Unsafe Ordnance:

9.3.5.1. If the GWC reveals a potential unsafe weapons condition, the following conditions apply.

9.3.5.1.1. Live Internal Weapons: MOC will be notified of unsafe condition. Aircrew will be directed to shut down engines and egress the aircraft. Bomb Bay doors will not be opened until weapons are safe/secured. If bomb fuzing wires/lanyards have not pulled through fuzing vanes, GWC will safe weapons and insure weapons are secured to prevent weapons from falling from aircraft. If bomb fuzing wires/lanyards have pulled through fuzing vanes EOD will be notified for weapons safe assessment, GWC will follow EOD direction to safe/secure weapons. Once weapons are safe/secure the aircraft will be towed to parking for weapons down load as required.

9.3.5.1.1.1. Inert Internal Weapons: MOC will be notified of unsafe condition. Bomb Bay doors will not be opened until weapons are safe/secured. GWC will safe/secure weapon. Once weapons are safe/secure the aircraft can taxi to parking for weapon down load as required.

9.3.5.1.2. 3 External weapons: MOC will be notified of unsafe condition. Aircrew will leave engines running and GWC will safe/secure the weapons. After weapons are rendered safe by GWC personnel, the aircraft will taxi to parking for weapon down load as required.

10. EOR Emergency/Abnormal Procedures. In case of fire, one individual will notify the MOC by radio who in turn, will notify the Fire Department. All fires starting in the vicinity of ammunition or explosives shall be reported and fought immediately with all available means to prevent spreading of fire and munitions involvement. However, when flame is in direct contact with the munition, or if the fire is so large that it cannot be extinguished with the equipment at hand, the personnel involved shall immediately evacuate and seek safety.

JONATHAN M. ELLIS, Col, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFMAN 33-363, *Management of Records*, 01 MAR 2008

AFMAN 91-201, *Explosives Safety Standards*, 12 JAN 2011

AFMAN 91-201_AFGSCSUP_BARKSDALEAFSUP, *Explosive Safety Standards*, 29 SEP 2010

AFMAN 91-201_AFRCSUP_1, *Explosive Safety Standards*, 28 FEB 2012

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 JUN 2012

AFPD 21-1, *Air and Space Maintenance* and establishes, 25 FEB 2003

T.O. 11A-1-33, *Handling and Maintenance of Explosives Loaded Aircraft*, 26 OCT 2012

T.O. 1B-52H-33-2-1, *Non Nuclear Munitions Loading Procedures*, 30 APR 2012

1B-52H-33-2-2, *Non Nuclear Munitions Loading Procedures*, 18 JAN 2013

AF 847, *Recommendation of Change of Publication*

Abbreviations and Acronyms

AFPD—Air Force Policy Directive

AMXS—Aircraft Maintenance Squadron

APG—Airframe, Powerplant General

CAPA—Combat Aircraft Parking Areas

ECM—Electronic Counter Measurers

EOD—Explosive Ordnance Disposal

EOR—End of Runway

GWC—Ground Weapons Check

HC/D—Hazard Class/Division

HSAB—Heavy Stores Adapter Beam

IAW—In Accordance With

MOC—Maintenance Operations Center

PPE—Personal Protective Equipment

Q-D—Quantity-Distance

RDS—Records Disposition Schedule